

Amendments to Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. - 13. (canceled)

14. (currently amended) A computer tomograph system, comprising:

a rotating part for accommodating an X-ray tube and a detector;

a stationary part for rotatably supporting the rotating part, comprising at least one DC-to-AC converter for generating an alternating current at a first frequency;

a conductor mounted to the stationary part by support rods and supplied with alternating current from one or a plurality of the DC-to-AC converters, wherein the conductor extends as a straight line in a rotating first plane, and an arcuate line in another plane perpendicular to the first plane along a rotational path in which the rotating part rotates; and

an inductive coupler mounted to the rotating part for movement along the straight, arcuate line of the conductor for coupling electrical energy out of the conductor as the rotating part rotates.

15. (previously presented) The computer tomograph system according to claim 14, wherein the conductor further comprises 2, or 3 parallel conductors through which electric currents flow so that the sum of the currents through all conductors is zero at every place of the conductor arrangement.

16. (previously presented) The computer tomograph system according to claim 14, wherein the conductor comprises a plurality of segments along a circumferential direction.
17. (previously presented) The computer tomograph system according to claim 14, wherein a plurality of couplers are provided, at least one coupler being engaged with the conductor arrangement at any instant of time.
18. (previously presented) The computer tomograph system according to claim 14, wherein at least one coupler comprises magnetically soft material for concentrating magnetic flux.
19. (previously presented) The computer tomograph system according to claim 14, wherein a plurality of DC-to-AC converters are provided, each supplying current to one segment of the conductor.
20. (previously presented) The computer tomograph system according to claim 14, wherein at least one DC-to-AC converter is adapted to supply current to one segment of the conductor at or close to a respective resonance frequency.
21. (previously presented) The computer tomograph system according to claim 14, wherein at least one series capacity is connected in series with the conductor or the coupler.
22. (previously presented) The computer tomograph system according to claim 14, wherein at least one parallel capacity is connected in parallel with the conductor or the coupler.
23. (previously presented) The computer tomograph system according to claim 14, wherein at least one DC-to-AC converter is adapted to detect a condition in which the conductor, or a segment of the conductor, is not engaged with at least one coupler, and to be switched off or controlled to a no-load frequency in case of non-engagement.

24. (previously presented) The computer tomograph system according to claim 14, wherein at least one DC-to-AC converter is adapted to issue an alternating current of at least one second frequency to supply current to at least one other consumer, and wherein at least one coupler, or a circuitry of a coupler, is adapted to be frequency selective to select the at least one second frequency, and to pass substantially a tapped-off signal or tapped-off energy having the second frequency to at least one other consumer.

25. (previously presented) The computer tomograph system according to claim 14, wherein at least one DC-to-AC converter is adapted to issue an alternating current at a variable pulse-width repetition rate, and wherein a filter unit is provided on the rotating part to select frequency components with whole-number multiples of the first frequency, and to supply current having the selected frequency components to at least one other consumer.

26. (previously presented) The computer tomograph system according to claim 14, wherein at least one DC-to-AC converter is adapted to issue an alternating current having a modulated output frequency, a frequency sweep being chosen to be so small that no significant fluctuations of amplitude of an output current occur, and simultaneously the modulation frequency being chosen to be higher than, or equal to, 100 Hz.

27. (previously presented) A computer tomograph system, comprising:

a rotating part for accommodating an X-ray tube and a detector;

a stationary part for rotatably supporting the rotating part, comprising at least one DC-to-AC converter for generating an alternating current at a first frequency;

a conductor mounted to the rotating part; and

an inductive coupler mounted to the stationary part and partially surrounding the conductor, along the length of the conductor, as the conductor moves correspondingly with rotation of the rotary part, wherein the coupler is supplied

with alternating current from one or a plurality of the DC-to-AC converters for coupling electrical energy into the conductor.

28. (previously presented) The computer tomograph system according to claim 27, wherein the conductor further comprises 2, or 3 parallel conductors through which electric currents flow so that the sum of the currents through all conductors is zero at every place of the conductor arrangement.
29. (previously presented) The computer tomograph system according to claim 27, wherein the conductor comprises a plurality of segments along a circumferential direction.
30. (previously presented) The computer tomograph system according to claim 27, wherein a plurality of couplers are provided, at least one coupler being engaged with the conductor at any instant of time.
31. (previously presented) The computer tomograph system according to claim 27, wherein at least one coupler comprises magnetically soft material for concentrating magnetic flux.
32. (previously presented) The computer tomograph system according to claim 27, wherein a plurality of DC-to-AC converters are provided, each supplying current to one segment of the conductor.
33. (previously presented) The computer tomograph system according to claim 27, wherein at least one DC-to-AC converter is adapted to supply current to one segment of the conductor at or close to a respective resonance frequency.
34. (previously presented) The computer tomograph system according to claim 27, wherein at least one series capacity is connected in series with the conductor or the coupler.
35. (previously presented) The computer tomograph system according to claim 27, wherein at least one parallel capacity is connected in parallel with the conductor arrangement or the coupler.

36. (previously presented) The computer tomograph system according to claim 27, wherein at least one DC-to-AC converter is adapted to detect a condition in which the conductor, or a segment of the conductor, is not engaged with at least one coupler, and to be switched off or controlled to a no-load frequency in case of non-engagement.

37. (previously presented) The computer tomograph system according to claim 27, wherein at least one DC-to-AC converter is adapted to issue an alternating current of at least one second frequency to supply current to at least one other consumer, and wherein at least one coupler, or a circuitry of a coupler, is adapted to be frequency selective to select the at least one second frequency, and to pass substantially a tapped-off signal or tapped-off energy having the second frequency to at least one other consumer.

38. (previously presented) The computer tomograph system according to claim 27, wherein at least one DC-to-AC converter is adapted to issue an alternating current at a variable pulse-width repetition rate, and wherein a filter unit is provided on the rotating part to select frequency components with whole-number multiples of the first frequency, and to supply current having the selected frequency components to at least one other consumer.

39. (previously presented) The computer tomograph system according to claim 27, wherein at least one DC-to-AC converter is adapted to issue an alternating current having a modulated output frequency, a frequency sweep being chosen to be so small that no significant fluctuations of amplitude of an output current occur, and simultaneously the modulation frequency being chosen to be higher than, or equal to, 100 Hz.